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Letter to the Editor

Evaluation of hematological indices in patients with colon cancer

Kemalettin Yılmaz

Department of Gastroenterology, Lokman Hekim Etlik Hospital, Ankara, Turkey

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Corresponding Author: Kemalettin Yılmaz, kemalettiny2002@yahoo.com

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Dear Editor,

I read with interest the formerly published paper entitled "Retrospective evaluation of platelet indices and RAS mutations in patients with colon cancer" by Şanlıer et al.[1] In that published paper, the authors evaluated the hematological indices in colon cancer patients and their relationships between RAS mutations. It has been noticed that the authors evaluated neutrophil to lymphocyte ratio (NLR), mean platelet volume (MPV), platelet to lymphocyte ratio (PLR) and red cell distribution width (RDW) as hematological indices in colon cancer cases. I would like to thank the authors for valuable contribution to the literature for especially topic on colon cancer.

Neutrophil to lymphocyte ratio is an old biochemical parameter that is often used as an indicator of inflammation, but has recently been used eagerly by many researchers.[2] The fact that it is cheap and easy to obtain has caused this parameter to be used frequently in scientific studies. Previously, it has been shown that hepatitis B and/or C infection, diabetes mellitus disease, many kind of heart diseases, thyroid functional abnormalities, many kind of drugs and medications, many kind of infections and inflammatory diseases (acute pancreatitis etc), many kind of malignancies (such as esophageal cancer, lung cancer etc) may easily affect the hematological biomarker NLR.[2-7] In line with these facts, it would have been more better if Şanlıer et al.[1] had mentioned these NLR-affecting disease while evaluating the NLR in colon cancer. On the other hand, if they added more patients to the study, the results would be stronger and more objective. Moreover, it would be more relevant if the researchers had mentioned the time elapsed between obtaining the blood samples and measuring this parameter, because waiting time period may easily affect NLR.[3,5-7]

Mean platelet volume is also an easily available and a cost-effective biochemical parameter that used currently in many wide spectrum studies. It has been shown that, besides colon cancer and many other types of cancers, hepatitis B and C infection, several bacterial and viral infections, autoimmune disorders, thyroid diseases, chronic renal failure, a lot of inflammatory status may also affect MPV levels.[8-12] It would have been better if the authors stated these all mentioned MPV affecting conditions above while determining the role of MPV in colon cancer cases. Again, blood sample collecting time and MPV testing time is important for securing an optimal and correct MPV value.[9-12]

Platelet to lymphocyte ratio[4,5] and platelet distribution width (PDW) are also platelet based biochemical markers which are used in Şanlıer et al.[1] study. As mentioned above, these two platelet based easily available markers are also affected many kind of chronic diseases disease, malignities and also inflammatory conditions.[4,5,13,14] Again, it would have been more relevant if these situations were taken into consideration while predicting the relationship between RAS, colon cancer and these biomarkers.

CONCLUSION

I believe that the results, finding and statements of Şanlıer et al.[1] will lead and facilitate to newer valuable studies focusing on relationship between PLR, PDW, NLR, MPV, RDW, and colon malignities. But, it should not be overlooked that these hematological indices may not be true indicators of colon malignities related conditions without a clear and detailed exclusion criteria. Moreover, disease associated other clinical, laboratory, and imaging variables should be taken in to consideration.

ETHICAL DECLARATIONS

Referee Evaluation Process: Externally peer-reviewed.

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